Department of Veterans Affairs
Office of Cyber and Information Security

OCIS

Welcome and Introduction

"Cyber Security Awareness" is the knowledge that VA employees, contractors, and volunteers utilize to protect VA computer systems and data. It is more than policies, procedures, rules, and regulations. Cyber Security Awareness refers to the personal responsibility each of us assumes for ensuring:

- the confidentiality, integrity, and appropriate availability of veterans' private data
- timely and uninterrupted flow of information throughout the VA enterprise
- VA information systems are protected from the potential of fraud, waste and abuse

Please be aware of any activity that might violate and/or compromise the security of the VA information systems. Report all incidents to your information security officer.

Know Your ISO:

- Do you know all the rules and requirements you should follow to keep VA's information secure?
- Do you know what to do if your computer is infected with an electronic virus?
- If you witnessed someone using VA's computers for theft or fraud, what would you do?
- Do you know your responsibilities for maintaining confidentiality and privacy?
- Are you sure that your work is backed up and safe?
- Do you know your role in your facility's contingency plan?

There is someone available to help you – your facility Information Security Officer (ISO). Every VA facility has an assigned ISO who can help answer these questions and more.
It is important to know that we are all responsible for information security. Your ISO is a great resource for learning about those responsibilities and how to react if you become aware of a problem.

The Mpls VAMC ISO is Bob Baller. His extension is 4490.

Passwords

Passwords are important tools for getting your job done. They ensure you have access to the information you need. Keep your password secret to protect yourself and your work. If you have several passwords, it is permissible to record and store them in a safe place, to which only you have access.

Password Requirements:

Passwords Must:

- Be constructed of at least eight characters (i.e., Gabc123&)
- Use at least three of the following four kinds of characters:
  - Upper case letters (ABC…)
  - Lower case letters (…xyz)
  - Numbers (0123456789)
  - `Special characters', such as #, &, *, or @
- Be changed at least every 90 days

Using these rules will provide you with a "strong" password. VA requires strong passwords on all information systems.

Password Theft:

Passwords can be easily stolen or duplicated if constructed poorly. Most password thefts occur as a result of poorly constructed passwords or an unauthorized person's manipulation of your trust.

Poor Password Construction:

Many factors can contribute to poor passwords. Some of the most notable are:

- Passwords that are not "strong", as explained above
- Use of common words easily obtained from a dictionary
- Passwords referring to your personal life (for example, names of family members or pets)

Easily identifiable passwords are an open invitation to hackers.

Rules of Thumb for Passwords:

- Don't use words found in a dictionary.
- Follow the rules for strong passwords
- Don't use personal references (names, birthdays, addresses, etc.)
- Change your passwords at least every 90 days. If you suspect that someone is trying or may have obtained your password, change it immediately, and inform your Information Security Officer.
- Be sure nobody can watch over your shoulder while you type your password. Ask them to turn away while you type. Position your keyboard so that it is not easy to see what you type.
- Keep passwords secret. Don't tape them to your computer, monitor, or keyboard. If due to the number of passwords you have to remember, you may want to write them down and you must securely lock them away where others cannot access them.

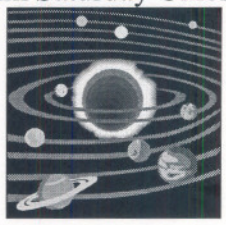
Remember; don't store your passwords in the computer, as you may not be able to access them when you need them.

- Help to ensure that passwords and accounts for employees, volunteers, contractors, and students are terminated within 24 hours of their departure.

Remembering Passwords:

Since childhood, many people have used simple rhythms to remember things. Can you remember how you learned the alphabet, months of the year, state capitols, etc.? This is called using "mnemonics". For example, here is a mnemonic used to remember the planets of our solar system and their order is the rhythm:

"**M**ary **V**ery **E**asily **M**akes **J**am **S**aturday **U**nless **N**o **P**lums"



Helps you remember

Mercury, **V**enus, **E**arth, **M**ars, **J**upiter, **S**aturn, **U**ranus, **N**eptune, **P**luto

It may sound silly, but it works. Your memory makes sensible links between information, fitting facts into mental structures and frameworks. Building a simple mnemonic may not work if it does not make sense, but it only needs to make sense to you.

Mnemonics are a useful tool in constructing passwords that cannot be found in a dictionary. How about using this as a password for the mnemonic above:

MVEMJS,unp

For more information about passwords, ask your Information Security Officer (ISO).

Confidentiality

In VA, confidentiality is a must. Perhaps you have wondered what this means and what you need to do about it. Confidentiality is the condition in which VA's information is available to only those people who need it to do their jobs.

Breaches in confidentiality can occur if you walk away from your computer without logging off or when paper documents are not adequately controlled. They sometimes occur when you are accidentally given access to too much computer information. Put another way, breaches can occur when someone has access to information that they do

not need to do their jobs. Conversations about veteran's cases in public places such as elevators and hallways can be a breach of confidentiality.

VA's computers are designed to protect confidentiality, but remember that there are things you can do, and things you should not do, to protect confidentiality.

Computer Disposal and Confidentiality:

Getting rid of old computer equipment? Be careful! We in VA often look for ways to assist the community; it's one of the best things about us.

Not long ago, some VA computers containing patient data and other information were inadvertently released into the community. This created an unacceptable and very serious breach of confidentiality. Imagine seeing your own personal information on a used VA computer that was donated to a school! While it is usually the responsibility of Information Technology (IT) staff to ensure the complete erasure of data before disposal of equipment, there are things you can do to help.

- When possible, store your data on network drives instead of your desktop computer.
- If you notice computers being excessed without full data erasure, let your ISO know.
- Know that the "delete" command cannot remove all traces of data from your computer.

To address the problem of removing all data from computers prior to disposal, VA's Office of Cyber and Information Security has purchased a special software tool. This tool prepares computers for proper disposal by "overwriting" the data on a hard drive several times. This process obliterates and makes the data irretrievable in any form. Every VA facility has received this tool for the IT staff to use. Working together, we will ensure that this never happens again!

Your ISO can help you find other ways to secure your data. For more information, contact your facility Information Security Officer (ISO).

Privacy

As Americans, we have fundamental expectations for privacy. The right to privacy is even built into our Bill of Rights as a basic human dignity afforded citizens. Privacy has a special legal meaning for government agencies. The Privacy Act requires that we as government employees take special care when we provide information to anyone about our veterans and other customers. Providing personal information to anyone, including veterans themselves, must be done only by persons authorized to do so. The same applies to requesting and receiving information about us as employees and/or as veterans. Care must also be taken to assure that recipients of information are authorized to receive

that information. As VA employees, we must follow legal procedures for giving out and receiving information. These procedures ensure that information is distributed in a responsible manner and that VA accounts for the transaction.

Information Privacy, Security, and the VA Mission:

Part of the VA mission is to ensure America's veterans receive medical care and benefits with dignity and compassion. To accomplish this, VA gathers all kinds of information from its beneficiaries. Much of it is related to health care, military service, finances, education, and other personal information. Lest we forget, something as simple as a veteran's home address and phone number is privileged information. The Privacy Act requires that we as government employees take special care when we provide information to anyone about veterans and others. The Healthcare Insurance Portability and Accountability Act (HIPAA), has further clarified and standardized these responsibilities. HIPAA also imposes new, significant civil and criminal penalties on you, personally, for noncompliance or violations.

Helpful Guidance for Handling Privacy Requests:

If another VA employee asks you for veteran information under your control, your response may depend on several things, including:

- The purpose of the request
- The authority of the individual making the request
- The established procedures for managing the request

If the request does not follow the standard procedures that you are familiar with, do not hesitate to consult your supervisor for directions prior to accessing or disclosing any information.

A Little Curiosity Can Be Harmful…

…Don't let it hurt you, any veteran, or your coworkers.

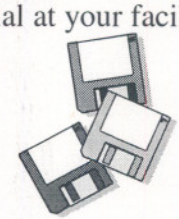
It is human nature to be curious. We all may have occasional urges to find out a little bit more about each other. When tempted to delve into personal information about veterans you come in contact with or employees you work with, the best advice is stop and consider your actions:

- Do you have a need to know in order to do your job?
- The person you are curious about has the right to be treated with respect, dignity, and have their privacy maintained.
- Un authorized access or use of veteran, employee, or enterprise information entrusted to VA is a serious offense. Disciplinary action can be brought against you as well as legal action that could result in civil and felony punishment.

Through established policies and procedures, VA has developed measures to protect the privacy and confidentiality of veterans and employees. Policies and procedures are only

as good as the individuals who implement and follow them. Your informed knowledge and professional experience is the best defense against unauthorized use and disclosure of information.

Requests for information from the public, media (newspapers, or radio and television stations), and others must be handled in a manner that protects the privacy of veterans, their families, and confidential corporate information. Such requests must be referred to the appropriate official at your facility.



Backups

The work you do on VA's computers is important. It is important to you because you spent time and effort to create it. It is important to VA and to veterans because it supports our mission.

Is your work "backed up" and safe from loss? In most VA facilities, systems managers have created ways to ensure your work is saved in several places (backed up) so it is not lost. You should make sure your work is back up.

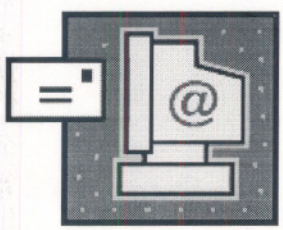
Making a copy of files for the purpose of having them available in case of a computer failure is called "backing up" or "creating a backup". Backups are done to a second storage medium such as a diskette, zip disk, CD, or tape. Information systems managers take purposeful steps to ensure that VA data is safe by systematically and routinely creating database backups on systems such as VistA and others. It may not be reasonable to expect IT staff to be responsible for backing up the information on the PC's of every user in your facility, so you may need to assume this responsibility yourself. If you are at all unsure if your work is backed up, contact your ISO.

Helpful suggestions to assist you in backing up your files:

- The most important files to backup are the ones you create such as word processing, spreadsheet, and presentation files. At home, you will want to back up your financial file (Quicken, Money, TurboTax, etc.).
- Software programs do not need to be backed up. The can usually be reinstalled from the original media.
- Store the files you create in a single location on your computer such as the "My Documents" folder. Doing so will make it easier to quickly create your backup. If you store your files in many different locations, it will be more time consuming to locate them and may prevent you from routinely backing up all of your files
- Set a schedule for backups appropriate to your needs. Some people may need to create daily backups. For others, weekly or even monthly may be adequate. Don't risk any more data to inadequate backups than you are willing to lose or have to recreate.

- After creating a backup, verify that you can access your storage medium and open the files on it.
- Storage media wear out, especially magnetic media. It is like watching an old movie on film or videotape. The recorded signal gradually wears out resulting in a grainy or unstable picture. This happens over time. Rotate your storage disks and periodically replace them with new disks or new technology.
- Clearly identify the files on your storage medium. Trying to find a specific file in a pile of unlabeled disks is time-consuming and risky.
- Store your backups in a safe and secure place.

The most reliable computers are apt to eventually fail as a result of age, heat, dust, or mechanical failure. Backups are cheap insurance. The question is not if you will ever need to use your backup. Instead, the question is when. Your supervisor or Information Security Officer (ISO) can tell you if your work is safe and can help you create a way to routinely back it up.



E-mail

In VA, E-mail has become a vital tool in conducting our business. Proper use of VA electronic mail is essential to ensure this resource is uninterrupted and used in legal ways. Chain letters and hoax messages rob us of valuable network capacity, computer space, and processing speed. You should not forward these messages to others. In fact, don't even request the sender stop sending you messages. Just delete them. These "please stop" messages sent by the thousands slow down our e-mail systems! Sensitive information should not be sent using e-mail unless it can be done securely. Before you send sensitive information on e-mail, you must ensure that it can be done securely. Some computer viruses attack e-mail systems, making them unavailable. You should learn to recognize the signs of a virus infection.

E-mail Privacy and Security:

Do not think of e-mail as being similar to a personal letter delivered to you in a sealed envelope by the post office. Instead, e-mail is more like a postcard. Most often, it gets dependably delivered but there may be opportunities along the way for people other than the addressee to view the contents.

E-mail is not considered private. You should have no expectation of privacy when using e-mail to transmit, store and communicate information. E-mail is not considered secure. E-mail systems, including VA's, are vulnerable to virus attacks. In fact, most computer viruses are spread through e-mail messages.

E-mail hints for work and home:

- Utilize virus-scanning software. Be sure it is kept up-to-date. Scan all e-mails and attachments sent to you.
- Always be cautious in opening e-mail from people you don't know. Make sure the subject lines are appropriate before opening. If you are not sure whether the e-mail is legitimate, then contact the sender by phone.
- Don't open attachments from people you don't know.
- Utilize e-mail in an appropriate manner. Don't forward or create hoaxes or ask people to modify their computer systems. Don't spread rumors using e-mail. Be suspicious of any message that tells you to forward it to others.
- Unsubscribe from mailing lists in which you are no longer interested.
- Don't participate in "mail storms" involving scores of users responding "me too!" or "thanks" or even "please stop".
- Use "reply to all" sparingly. Does everyone in your large mail group really need to see your response? Often, it is more appropriate to limit your response to just the sender.

Viruses

Do you know that computer viruses can be one of the biggest causes of business loss in VA? High-tech vandals have created ever-more dangerous infectious programs that, in the past, have overcome VA's defenses. When that happens, the data we depend on to fulfill our mission is compromised. It takes time and money to defend against viruses. It requires employee time to recover from attacks. Take an active role in virus defense. Find out if the computer you are using is protected. When antivirus programs are loading, let them run to completion. Viruses can be contracted through a variety of access points on your computer, from a software disk, a CD-ROM, DVD, removable storage medium (zip drives, etc) or e-mail. Make sure data files and programs you load on your computer are authorized and free from viruses.

Symptoms:

If your computer has any of these symptoms, there may be a problem:

- reacts slower than usual
- stops running for no apparent reason
- fails to boot
- seems to be missing important files
- prevents you from saving your work

Virus defense for work and home:

In VA, all computers are required to have virus protection software. To be effective, the virus protection software must be kept up to date. New updates are usually issued every week. Contact your ISO or information technology staff if your VA computer is not up to date. While many sites automatically update virus protection software on networked computers, remember that non-networked computers, particularly VA issued laptops, will not receive automatic updates to virus protection software.

Here is a list of things you can do:

- Delete e-mail messages with unusual subject lines, for example, "Open this immediately".
- Never stop or disable your anti-virus program.
- Be cautious and sensitive to attachments that have file extensions that execute system commands or applications. For example: .exe, .vbs, .js, jse, wsf, vbe and wsh.

Incidents

Unfortunately, the same computers that help us serve veterans can also be used for theft and fraud. Electronic viruses can attack our computers. They can also be stolen and vandalized. They can be used to distribute sensitive information to those not authorized to receive it. All these are examples of computer-related incidents. It is important to let your supervisor and Information Security Officer (ISO) know when you witness such incidents. Your ISO will contact the VA Central Incidents Response Capability (VACIRC). Reporting cyber security incidents helps VA to reduce the negative impact of these events and to improve VA's information processing ability.

When you think a computer security incident may have occurred, you should:

- Gather details of the incident so you can communicate specific information to your ISO.
- Collect the date, time, location, and involved computer systems.
- Describe what you believe happened.
- Write down any error messages displayed on your computer screen.
- Write down any involved web addresses, server names, or IP addresses.

Time may be of the essence. Don't wait to call your ISO.

E-mail may not be the best way to report the incident. You may need to contact your ISO by phone or in person.

Limit discussion of the incident to only those with a specific need to know.

Do not discuss the incident with the media or anyone outside of your facility without first consulting your ISO and facility management.

To report a cyber security problem, your primary point of contact is your information security officer.

Authorized Use

Make sure when you are asked by someone to provide information or allow the use of your computer or accounts (in person, over the phone, or electronically), that you are certain of who they are and of their authorization to have/use that information or access as part of their job. Dishonest people look for almost any kind of information to misuse, like your password or patient, budget, or employee information. VA employees have a natural desire to be helpful and provide useful information. Don't let anyone try to take advantage of this to misuse resources or information.

The citizens of our country expect that as VA employees, we will not misuse or abuse the resources provided to us to accomplish our mission. As a VA employee, you may have the privilege of some "Limited Person Use" of certain government resources, such as computers, e-mail, Internet access, and telephone/fax service. This benefit is available only as long as it does not interfere with official VA business, involves minimal additional expense to the Government, and is legal and ethical. Remember that your personal use may be limited at any time either by your management or by those responsible for the particular government resource you want to use. Before using this privilege, you should discuss your limits and responsibilities in using it with your supervisor and Information Security Officer (ISO).

Ethics:

"Ethics is about understanding how your actions affect other people, knowing what is right and wrong, and taking personal responsibility for your actions…" –Winn Schuartau

Ethics deals with lacing a "value" on acts according to whether they are "good" or "bad". Every society has its rules about whether certain acts are ethical or not. The same thing is true when using a VA computer system to access confidential information.

Examples of Misuse or Inappropriate Use includes the following:

- Any personal use that could cause congestion, delay, or disruption of service to any Government system or equipment. For example, continuous data streams, video, sound, or other large file attachments that degrade performance of VA's network.
- Using VA systems as a staging ground or platform to gain unauthorized access to other systems.
- The creation, copying, transmission, or retransmission of chain letters or other unauthorized mass mailings regardless of the subject matter.
- Activities that are illegal, inappropriate, or offensive to fellow employees or the public. Such activities include hate speech, or material that ridicules others on the basis of race, creed, religion, color, sex, disability, national origin, or sexual orientation.

- The creation, downloading, viewing, storage, copying or transmission of sexually explicit or sexually oriented materials.
- The creation, downloading, viewing, storage, copying, or transmission of materials related to gambling, illegal weapons, terrorist activities, and any illegal activities or activities otherwise prohibited.
- Use for commercial purposes or in support of "for profit" activities or in support of other outside employment or business activity (e.g. consulting for pay, sales or administration of business transactions, sale of goods or services).
- Engaging in any outside fund-raising activity, endorsing any product or service, participation in any lobbying activity, or engaging in any prohibited partisan political activity.
- Posting agency information to external newsgroups, bulletin boards, or other public forums without authority. This includes any use that could create the perception that the communication was made in one's official capacity as a VA employee (unless appropriate approval has been obtained), or uses that are at odds with the agency's mission or positions.
- Any use that could generate more than minimal additional expense to the government.
- The unauthorized acquisition, use, reproduction, transmission, or distribution of any controlled information including computer software and data, that includes privacy information; copyrighted, trademarked, or material with other intellectual property rights beyond fair use; proprietary data; or export-controlled software or data.

Be sure to discuss your limits and responsibilities with your supervisor and Information Security Officer (ISO).